

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A composition, comprising:

- at least one linear polymer that is water-insoluble and soluble in at least one water-miscible solvent,
- at least one water-insoluble, hydrophilic crosslinked polymer, [[and]]
- at least one biocompatible, water-miscible solvent selected from the group consisting of N-methylpyrrolidone, dimethylethylamide, diethylene glycol dimethyl ether, ethyl lactate, ethanol, dimethoxyethane, dimethylsulfoxide, glycofurool, and mixtures thereof; and
- optionally, at least one adjuvant selected from the group consisting of a dye, an imaging marker, an anti-inflammatory agent, an angiogenic agent, an antimitotic, an angiogenesis inhibitor, a growth factor, a vitamin, a hormone, a protein, a vaccine, a peptide, an antiseptic, an antimicrobial agent, and combinations thereof;

wherein the composition is in the form of a suspension of solid particles of said hydrophilic crosslinked polymer in a solution of said linear polymer and the water-miscible solvent.

Claim 2 (Previously Presented): The composition as claimed in claim 1, wherein the at least one linear polymer is selected from the group consisting of poly(alkyl acrylates), poly(alkyl methacrylates), poly(alkyl cyanoacrylates), poly(vinyl acetates), poly(vinyl butyrates), poly(vinyl formals), poly(vinyl acetals), poly(vinyl butyrals), polyoxypropylenes, polyoxytetramethylenes, water-insoluble esters of chitosan, water-insoluble esters of polysaccharides, polylactides, polyglycolides, polycaprolactone, poly(malic acid) esters,

Application No. 10/541,362  
Reply to Office Action of March 1, 2010

poly(maleic acid) esters, poly(fumaric acid) esters, water-insoluble linear copolymers, and combinations thereof.

Claim 3 (Previously Presented): The composition as claimed in claim 1, wherein the at least one linear polymer is selected from the group consisting of poly(hydroxyethyl methacrylate), poly(methyl methacrylate), poly(hydroxypropyl methacrylate), a copolymer of hydroxyethyl methacrylate and acrylonitrile, a copolymer of hydroxypropyl methacrylate and acrylonitrile, a copolymer of hydroxyethyl methacrylate and N-tert-butylacrylamide, a copolymer of hydroxypropyl methacrylate and N-tert-butylacrylamide, a copolymer of hydroxyethyl methacrylate and acetoacetoxyethyl methacrylate, a copolymer of hydroxypropyl methacrylate and acetoacetoxyethyl methacrylate, poly(N-acryloyl-2-amino-2-hydroxymethyl-1,3-propanediol), poly(n-2-hydroxypropyl methacrylamide), and combinations thereof.

Claim 4 (Previously Presented): The composition as claimed in claim 1, wherein the at least one linear polymer is selected from the group consisting of a copolymer of hydroxypropyl methacrylate and acrylonitrile, a copolymer of hydroxypropyl methacrylate and N-tert-butylacrylamide, a copolymer of hydroxypropyl methacrylate and acetoacetoxyethyl methacrylate, and combinations thereof.

Claim 5 (Previously Presented): The composition as claimed in claim 1, wherein the at least one linear polymer represents from 3 to 25% mass per volume (m/V) of the composition.

Claim 6 (Previously Presented): The composition as claimed in claim 1, wherein the at least one water-insoluble, hydrophilic crosslinked polymer is selected from the group consisting of polymers obtained from crosslinking polymers of at least one polymer type selected from the group consisting of poly(alkyl acrylates), poly(alkyl methacrylates), poly(alkyl cyanoacrylates), poly(vinyl acetates), poly(vinyl butyrates), poly(vinyl formals), poly(vinyl acetals), poly(vinyl butyral), polyoxypropylene, polyoxytetramethylene, water-insoluble esters of polysaccharides, polylactides, polyglycolides, polycaprolactone, poly(malic acid) esters, poly(maleic acid) esters, poly(fumaric acid) esters, water-insoluble linear copolymers, and combinations thereof.

Claim 7 (Previously Presented): The composition as claimed in claim 1, wherein the at least one water-insoluble, hydrophilic crosslinked polymer is obtained from crosslinking water-soluble linear polymers.

Claim 8 (Previously Presented): The composition of claim 7, wherein the water-soluble linear polymers are selected from the group consisting of alginates, starches, cellulose ethers, cellulose acetates with a degree of substitution of between 0.6 and 0.8, cellulose sulfates, water-soluble polysaccharides, chitosan salts, acrylic polymers, methacrylic polymers, substituted polyacrylamides, substituted polymethylacrylamides, unsubstituted polyacrylamides, unsubstituted polymethacrylamides; hydrolyzed poly(vinyl acetates), polymers obtained from polyoxyethylene, polyethyleneimine, polyvinylpyrrolidone, polyurethanes, combinations of these polymers, and salts of these polymers.

Claim 9 (Previously Presented): The composition as claimed in claim 1, wherein the at least one water-insoluble hydrophilic crosslinked is selected from the group consisting of a

crosslinked polymers of hydroxyethyl methacrylate, crosslinked polymers of hydroxypropyl methacrylate, crosslinked polymers of poly(N-acryloyl-2-amino-2-hydroxy-methyl-1,3-propanediol), crosslinked copolymers of hydroxyethyl methacrylate and poly(N-acryloyl-2-amino-2-hydroxymethyl-1,3-propanediol), crosslinked polymers of hydroxypropyl methacrylate and of poly(N-acryloyl-2-amino-2-hydroxymethyl-1,3-propanediol), and combinations thereof.

Claim 10 (Previously Presented): The composition of claim 1, wherein the degree of crosslinking of the at least one water insoluble, hydrophilic crosslinked polymer is between 0.5 and 12%.

Claim 11 (Previously Presented): The composition as claimed in claim 1, wherein the at least one water-insoluble, hydrophilic crosslinked polymer represents from 1 to 30% mass per volume (m/V) of the composition.

Claim 12 (Previously Presented): The composition according to claim 1, wherein the size of the particles of the at least one water-insoluble, hydrophilic crosslinked polymer ranges from 1 to 1000  $\mu\text{m}$ .

Claim 13 (Previously Presented): The composition of claim 1, wherein the composition comprises at least one linear hydroxyethyl methacrylate or hydroxypropyl methacrylate polymer or a linear hydroxyethyl methacrylate or hydroxypropyl methacrylate copolymer and particles of crosslinked polymers of hydroxyethyl methacrylate, of hydroxypropyl methacrylate or of poly(N-acryloyl-2-amino-2-hydroxymethyl-1,3-propanediol), and/or of crosslinked copolymers of hydroxyethyl methacrylate and of poly(N-

acryloyl-2-amino-2-hydroxymethyl-1,3-propane-diol) or of hydroxypropyl methacrylate and of poly(N-acryloyl-2-amino-2-hydroxymethyl-1,3-propanediol).

Claim 14 (Previously Presented): The composition as claimed in claim 13, wherein the composition comprises:

- at least one linear, hydroxyethyl methacrylate or hydroxypropyl methacrylate copolymer, and
- at least particles of crosslinked copolymers of hydroxyethyl methacrylate or hydroxypropyl methacrylate and of poly(N-acryloyl-2-amino-2-hydroxymethyl-1,3-propanediol).

Claim 15 (Currently Amended): The composition as claimed in claim 1, wherein the at least one biocompatible, water-miscible solvent is ~~selected from the group consisting of N-methylpyrrolidone, dimethylethylamide, diethylene glycol dimethyl ether, ethyl lactate, ethanol, dimethoxyethane, dimethylsulfoxide, glycofurool, and mixtures thereof.~~

Claim 16 (Currently Amended): The composition as claimed in claim 1 claim 15, wherein the at least one biocompatible, water-miscible solvent is selected from the group consisting of ethanol, N-methylpyrrolidone, and combinations thereof.

Claim 17 (Currently Amended): The composition as claimed in claim 1, further comprising ~~an adjuvant that is a dye one or more adjuvants selected from the group consisting of dyes, imaging markers, anti-inflammatory agents, angiogenic agents, antimitotics, angiogenesis inhibitors, growth factors, vitamins, hormones, proteins, vaccines, peptides, antiseptics, and antimicrobial agents.~~

Claims 18-19 (Cancelled).

Claim 20 (Currently Amended): A solution, comprising:

- at least one linear copolymer of hydroxypropyl methacrylate and of acrylonitrile, and/or at least one copolymer of hydroxypropyl methacrylate and of N-tert-butylacrylamide and/or at least one copolymer of hydroxypropyl methacrylate and of acetoacetoxyethyl methacrylate, and
  - at least one biocompatible, water-miscible solvent selected from the group consisting of N-methylpyrrolidone, dimethylethylamide, diethylene glycol dimethyl ether, ethyl lactate, ethanol, dimethoxyethane, dimethylsulfoxide, glycofurool, and combinations thereof;

it being understood that, when the solution contains a linear copolymer of hydroxypropyl methacrylate and of acrylonitrile, then the solvent is not dimethyl sulfoxide.

Claim 21 (New): The composition of claim 1, consisting essentially of:

- at least one linear polymer that is water-insoluble and soluble in at least one water-miscible solvent,
- at least one water-insoluble, hydrophilic crosslinked polymer,
- at least one biocompatible, water-miscible solvent selected from the group consisting of N-methylpyrrolidone, dimethylethylamide, diethylene glycol dimethyl ether, ethyl lactate, ethanol, dimethoxyethane, dimethylsulfoxide, glycofurool, and mixtures thereof; and
  - optionally, at least one adjuvant selected from the group consisting of a dye, an imaging marker, an anti-inflammatory agent, an angiogenic agent, an antimitotic, an

angiogenesis inhibitor, a growth factor, a vitamin, a hormone, a protein, a vaccine, a peptide, an antiseptic, an antimicrobial agent, and combinations thereof;

wherein the composition is in the form of a suspension of solid particles of said hydrophilic crosslinked polymer in a solution of said linear polymer and the water-miscible solvent.

Claim 22 (New): The composition of claim 1, consisting of:

- at least one linear polymer that is water-insoluble and soluble in at least one water-miscible solvent,
  - at least one water-insoluble, hydrophilic crosslinked polymer,
  - at least one biocompatible, water-miscible solvent selected from the group consisting of N-methylpyrrolidone, dimethylethylamide, diethylene glycol dimethyl ether, ethyl lactate, ethanol, dimethoxyethane, dimethylsulfoxide, glycofurool, and mixtures thereof; and
    - optionally, at least one adjuvant selected from the group consisting of a dye, an imaging marker, an anti-inflammatory agent, an angiogenic agent, an antimitotic, an angiogenesis inhibitor, a growth factor, a vitamin, a hormone, a protein, a vaccine, a peptide, an antiseptic, an antimicrobial agent, and combinations thereof;

wherein the composition is in the form of a suspension of solid particles of said hydrophilic crosslinked polymer in a solution of said linear polymer and the water-miscible solvent.

Claim 23 (New): The solution of claim 20, consisting essentially of:

- at least one linear copolymer of hydroxypropyl methacrylate and of acrylonitrile, and/or at least one copolymer of hydroxypropyl methacrylate and of N-tert-butylacrylamide and/or at least one copolymer of hydroxypropyl methacrylate and of acetoacetoxyethyl methacrylate, and
- at least one biocompatible, water-miscible solvent selected from the group consisting of N-methylpyrrolidone, dimethylethylamide, diethylene glycol dimethyl ether, ethyl lactate, ethanol, dimethoxyethane, dimethylsulfoxide, glycofurool, and combinations thereof;  
it being understood that, when the solution contains a linear copolymer of hydroxypropyl methacrylate and of acrylonitrile, then the solvent is not dimethyl sulfoxide.

Claim 24 (New): The solution of claim 20, consisting of:

- at least one linear copolymer of hydroxypropyl methacrylate and of acrylonitrile, and/or at least one copolymer of hydroxypropyl methacrylate and of N-tert-butylacrylamide and/or at least one copolymer of hydroxypropyl methacrylate and of acetoacetoxyethyl methacrylate, and
- at least one biocompatible, water-miscible solvent selected from the group consisting of N-methylpyrrolidone, dimethylethylamide, diethylene glycol dimethyl ether, ethyl lactate, ethanol, dimethoxyethane, dimethylsulfoxide, glycofurool, and combinations thereof;  
it being understood that, when the solution contains a linear copolymer of hydroxypropyl methacrylate and of acrylonitrile, then the solvent is not dimethyl sulfoxide.

Claim 25 (New): The solution of claim 20, wherein the at least one copolymer is selected from the group consisting of at least one linear copolymer of hydroxypropyl methacrylate and of acrylonitrile, at least one copolymer of hydroxypropyl methacrylate and of N-tert-butylacrylamide, at least one copolymer of hydroxypropyl methacrylate and of acetoacetoxyethyl methacrylate, and combinations thereof.